

AMENDMENTS TO THE CLAIMS:

Please amend claims 30 and 45 as indicated below. This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1.-29. (Canceled)

30. (Currently Amended) A method of generating triggers for the provision of location based services in a mobile communication network supporting a plurality of mobile terminals over a given territory, comprising the steps of:

defining a set of target areas within said territory, each target area in said set being identified by respective geographic data;

transforming said geographic data in a respective set of values of network related entities, said respective set of values being expected to be associated with a mobile terminal of said mobile network when located in the corresponding target area and at least one value of the respective set is weighted by margins of measurement accuracy a probabilistic index as a function of a temporal percentage of presence of at least one of the network related entities;

monitoring the values in said respective set as associated to at least one monitored mobile terminal in said mobile communication network;

checking whether said values as monitored match with said set of values as expected to be encountered; and

when a match is found, which is indicative of said monitored mobile terminal being located in a given target area of said set:

generating a trigger for prompting delivery of location based services related to said given target area in said set toward said monitored mobile terminal, and

activating a set of location actions carried out by said mobile terminal or said mobile network, to improve the accuracy of the location of said mobile terminal being monitored within said given target area.

31. (Previously Presented) The method according to claim 30, wherein for each mobile terminal, said set of values includes at least one value selected among a power value, a time value or a cell identifier relative to a cell different from a cell serving said mobile terminal.

32. (Previously Presented) The method according to claim 31, wherein said set of values comprises at least one value selected from CPICH RSCP, PCCPCH RSCP, GSM carrier RSSI, RTT in FDD, Rx Timing Deviation in TDD, SFN-SFN, RXLEV, and TA.

33. (Previously Presented) The method according to claim 31, wherein said set of values comprises at least one value selected from location areas, routing areas, cell identifiers, and corresponding adjacent frequencies.

34. (Previously Presented) The method according to claim 30, wherein said step of monitoring is carried out with said mobile terminal.

35. (Previously Presented) The method according to claim 30, wherein said step of checking is carried out with said mobile terminal.

36. (Previously Presented) The method according to claim 30, wherein said set of expected values comprises at least one entity external to said mobile network.

37. (Canceled)

38. (Previously Presented) The method according to claim 30, wherein said step of checking is carried at the network node level.

39. (Previously Presented) The method according to claim 30, wherein said step of monitoring is carried at the network node level.

40. (Previously Presented) The method according to claim 30, wherein said operation of transforming said geographic data is carried out at the network infrastructure level.

41. (Previously Presented) The method according to claim 30, wherein said operation of transforming said geographic data is carried out at the mobile terminal level.

42. (Previously Presented) The method according to claim 30, wherein said step of providing location based services is carried out at the network infrastructure level.

43. (Previously Presented) The method according to claim 30, wherein said step of providing location based services is carried out at the mobile terminal level.

44. (Previously Presented) The method according to claim 43, comprising the step of providing communication facilities for permitting said monitored mobile terminal to receive information from at least one data base containing information related to said location base services.

45. (Currently Amended) A mobile communication network supporting a plurality of mobile terminals over a given territory and adapted to provide location based services to said

mobile terminals, said territory comprising a set of target areas, each target area in said set being identified by respective geographic data, comprising:

a transformer module configured for transforming said geographic data in a respective set of values of network related entities, said respective set of values being expected to be associated with a mobile terminal of said mobile network when located in the corresponding target area and at least one value of the respective set is weighted by margins of measurement accuracy a probabilistic index as a function of a temporal percentage of presence of at least one of the network related entities; and

a monitor module configured for:

monitoring the values comprised in said respective set associated with at least one monitored mobile terminal in said mobile communication network,

checking whether said values as monitored match with said set of values,

generating, when a match is found, which is indicative of said monitored mobile terminal being located in a given target area of said set, a trigger for prompting delivery of said location based services related to said given target area in said set toward said monitored mobile terminal, and

activating a set of location actions carried out by said mobile terminal or said mobile network, to improve the accuracy of the location of said mobile terminal being monitored within said given target area.

46. (Previously Presented) The network according to claim 45, wherein for each mobile terminal, said set of values comprises at least one value selected among a power value, a time value or a cell identifier relative to a cell different from a cell serving said mobile terminal.

47. (Previously Presented) The network according to claim 46, wherein said set of values comprises at least one value selected from: CPICH RSCP, PCCPCH RSCP, GSM carrier RSSI, RTT in FDD, Rx Timing Deviation in TDD, SFN-SFN, RXLEV, and TA.

48. (Previously Presented) The network according to claim 46, wherein said set of values comprises at least one value selected from: location areas, routing areas, cell identifiers, and corresponding adjacent frequencies.

49. (Previously Presented) The network according to claim 45, wherein said monitor module is at least partly hosted in said mobile terminals.

50. (Previously Presented) The network according to claim 45, wherein said set of expected values includes at least one entity external to said mobile network.

51. (Canceled)

52. (Previously Presented) The network according to claim 45, wherein said transformer module is hosted at the network infrastructure level.

53. (Previously Presented) The network according to claim 45, wherein said transformer module is hosted at the mobile terminal level.

54. (Previously Presented) The network according to claim 45, comprising a service delivery module for providing said location based services, said service delivery module being hosted at the network infrastructure level.

55. (Previously Presented) The network according to claim 45, comprising a service delivery module for providing said location based services, said service delivery module being at least partly hosted at the mobile terminal level.

56. (Previously Presented) The network according to claim 55, comprising communication facilities for permitting said monitored mobile terminal to receive information from at least one data base containing information related to said location based services.

57. (Previously Presented) The network according to any of claim 45, wherein said monitor module is hosted at the network node level.

58. (Previously Presented) A computer readable medium encoded with a computer program product loadable into a memory of at least one computer, the computer program product comprising software code portions capable of performing the steps of the method of any one of claims 30 to 36 and 38-40.